

forty-five degrees
Careful Planning and Collective
Society
Toward a Transcultural
Space-Making

forty-five degrees
(Alkistis Thomidou and Gianmaria Socci)

The architecture collective *forty-five degrees*, consisting of Alkistis Thomidou and Gianmaria Socci, introduces itself in a comprehensive interview, challenging the notion of borders and homogeneous, top-down constructions of globalized geographies. They discuss the fact that spatial justice – the practice of commoning and collective actions, including a conscious approach to the environment, co-existence and collaboration – is inevitable in a caring and generous architecture of the future.



35 Meridians of Radical Rituals, forty-five degrees. Irmela Mensah-Schramm has been documenting and removing hate stickers and spraying love messages over hate graffiti throughout Germany since 1986.

Manifesto

forty-five degrees is an architecture and urban design practice dedicated to the critical making of collective space. Our particular interest lies in Europe, this hybrid place in constant mutation, where new emerging transcultural traditions, memories, and technologies have the potential to shape radical practices of commoning grounded on spatial justice and environmental awareness.

45° North: halfway between the equator and the North Pole, the center of gravity of Europe, the watershed between the Mediterranean of our idealism and the Northern seas of our pragmatism, an arbitrary border that thousands of migrants attempt to cross.

45° C: the highest temperature ever recorded in several European cities in 2019. It is a symbolic yet very tangible reminder that we can no longer postpone a societal shift toward degrowth and circularity.

45°, x=y: a straight line produced by the perfect equivalence of two terms, the parity between chromosomal differences, the interchangeability of alternative identities.

45°, diagonal: the balance between verticality and horizontality, top-down and bottom-up. It is a belief in democratic processes. It is a refusal of all absolutisms and prepotence.

45° proposes an oblique perspective on space-making, a view that goes beyond the façade of things and looks at their hidden corners and at the edges that define their realm of existence.

45° imagines design as a possible territory for emancipation. We envision an architecture that is open, generous, nondiscriminatory, anticolonial. We value humility and care.

45° is Alkistis Thomidou and Gianmaria Socci.

Raised in Italy and Greece, we both studied and practiced in Northern Europe. We have successfully collaborated in various competitions, but also individually worked on projects around the globe in places like Ethiopia, Brazil, and Thailand, investigating the built environment through research and design, across multiple scales and in its social, economic, and structural components.

Reflecting on the role of architecture and urban design today, we consider it our task to challenge the homogeneous, top-down constructions of globalized geographies. Our current work focuses on rediscovering the inventiveness of everyday life and the potential of alternative urban practices. Current dramatic developments expose the fragility of a lifestyle resulting from decades of neoliberal policies prioritizing profit over people, and demonstrate the need to revolutionize the way we manage and envision our communal space. We want to imagine how architecture can reinvent itself to support this venture, create spaces for authentic reflection on the problems of our times, and speculate on possible futures.



35 Meridians of Radical Rituals, forty-five degrees. Along the 45° parallel from the Atlantic coast to the Black Sea, we are searching for collective actions, heritage, and imaginaries that reinvent common space beyond identity and borders.

forty-five degrees in conversation

Alkistis, Gianmaria, you often use geographies as a starting point for your research and to talk about space.

We are very fascinated by borders, by the geometric qualities of these abstract entities that can be interpreted in various ways. If we look at them from a botanist's perspective, for instance, borders can become interfaces of connection and opportunity, where pioneer species find available ground and evolution happens. These borders define »not property, but space for the future.«¹ Rather than dividing walls, the borders that interest us are spaces of threshold, where the friction of diversity has a positive, generative power and new modes of coexistence can occur.

The lines that define these borders are multidimensional, they are physical, they have a thickness and fuzzy edges. They are ever-changing and evolve with the beings who inhabit them, who also in turn, are changed by them: »The self is only a threshold, a door, a becoming between two multiplicities.«² What is most interesting for us, is that if we look at borders beyond the usual political understanding of division, we can uncover most of the complexities of space from unusual perspectives, like in the short film we really love: *Powers of Ten: A Film Dealing with the Relative Size of Things in the Universe and the Effect of Adding Another Zero* by Charles and Ray Eames.

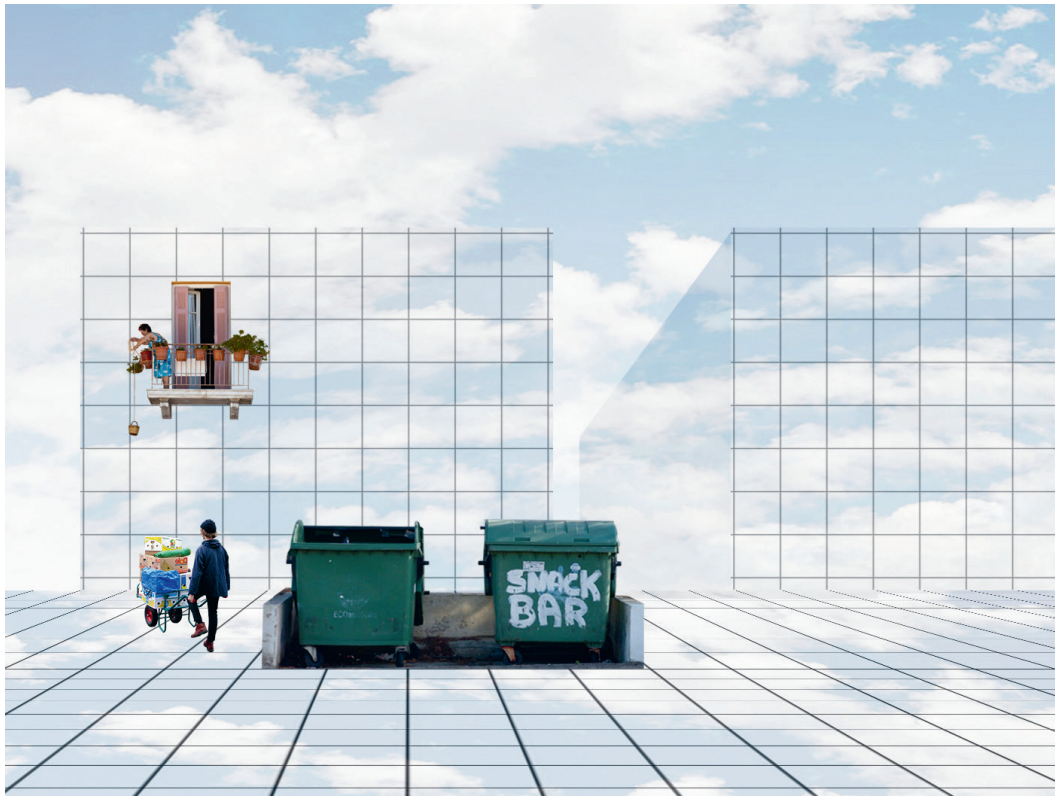
How did your work as a collective begin? And what are you currently working on?

After almost a decade of collaboration, we founded the collective *forty-five degrees* in October 2019. The name was inspired by the 45th parallel north that separates the »South« of Europe we come from, and the »North« where we currently live and work. An imaginary border, that after all, if we consider recent crises and the unfruitful negotiations that once again split the European »union« into two fronts, is not so imaginary.

We began our practice with the research project *35 Meridians of Radical Rituals*, an itinerant survey along the 45°N parallel. The project is about the inventiveness of everyday life, new hybrid vernaculars and communal space-making in Europe. We try to see how this system of meridians and parallels that describes our world is inhabited. We want to elevate this arbitrary line to a symbolic space in which we try to offset the notions of center and periphery and speculate on a different understanding of borders.

In 35 Meridians of Radical Rituals, cities along the 45°N latitude, like Belgrade, Pula, Tulcea, or Simferopol, serve as a starting point for your research. Looking at this marking makes me curious what urban strategies and cultural practices, and which differences or parallels, become visible in the communities of the respective cities. What can we possibly learn about Europe and its inhabitants through your project?

The 45°N parallel crosses several climates, geographies, and borders marked by socioeconomic and geopolitical struggle. Movements of people, knowledge, and goods made the hybrid place we call Europe. While exposing the contradictions that burden Europe today – inequalities in financial resources, migration management, civil rights – our gesture aims at reuniting rather than reinforcing those divisions. From the Atlantic Ocean to the Black Sea we can count 35 meridians. At these intersections we have identified cities and places that we believe are exemplary of Europe's hybridity. There are cities that are notorious melting pots – like Bordeaux or Ploiesti. But in general our list is in continuous evolution and we hope to find out more about them by looking closer rather than making assumptions from afar. In this linear research



35 Meridians of Radical Rituals, forty-five degrees. One man's trash is another man's treasure. Container or dumpster diving is the unusual activity of rescuing discarded surplus food from supermarkets or elsewhere, and offering it to the community.

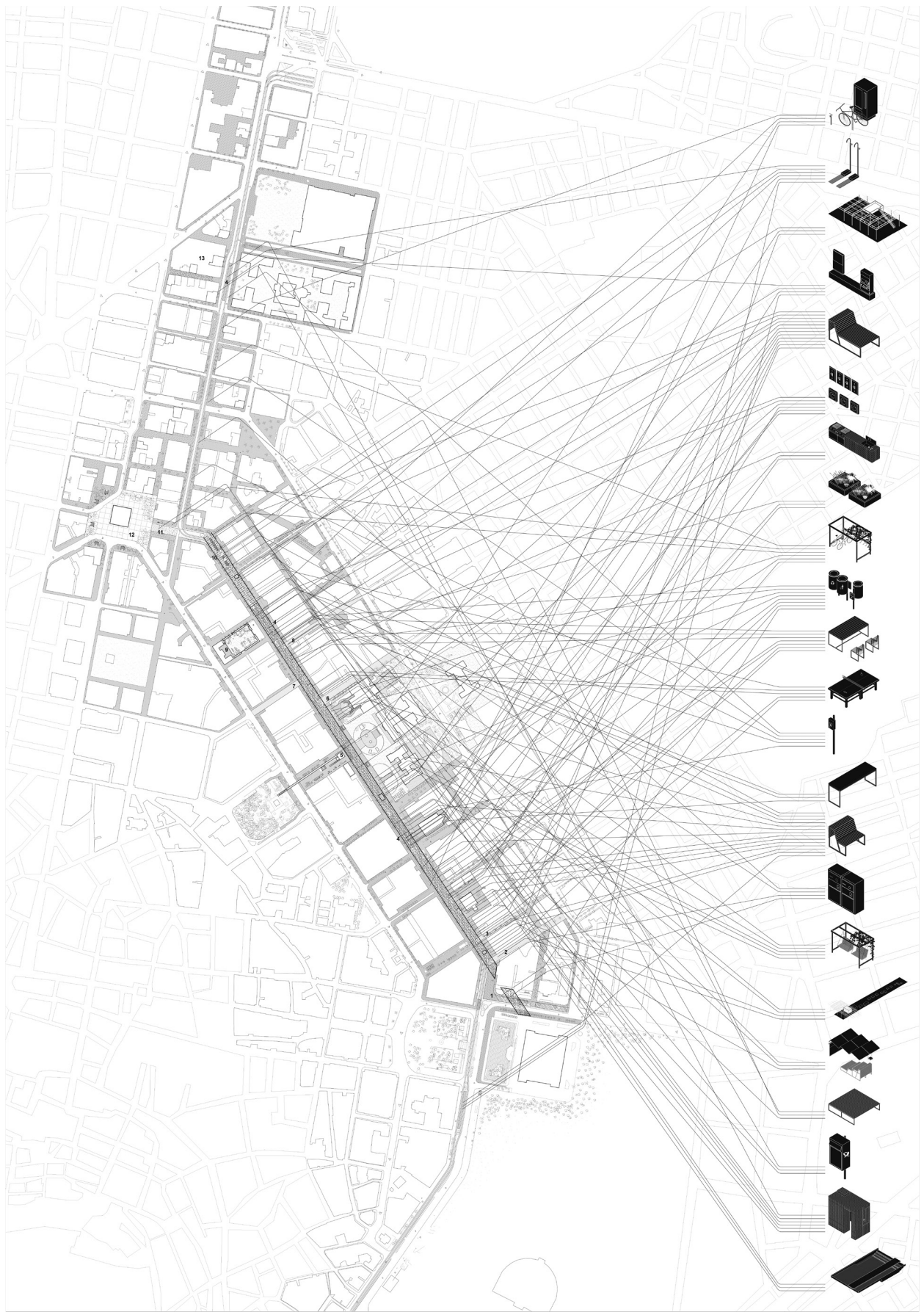
**A third space is not a physical place;
it is much more a space where
hybrid identifications are possible and where
cultural transformations can happen.**

we hope to find a third space between the apparent opposites that define the official narration of space-making, e.g. by uncovering collective actions that don't fall into the category of professional practice.

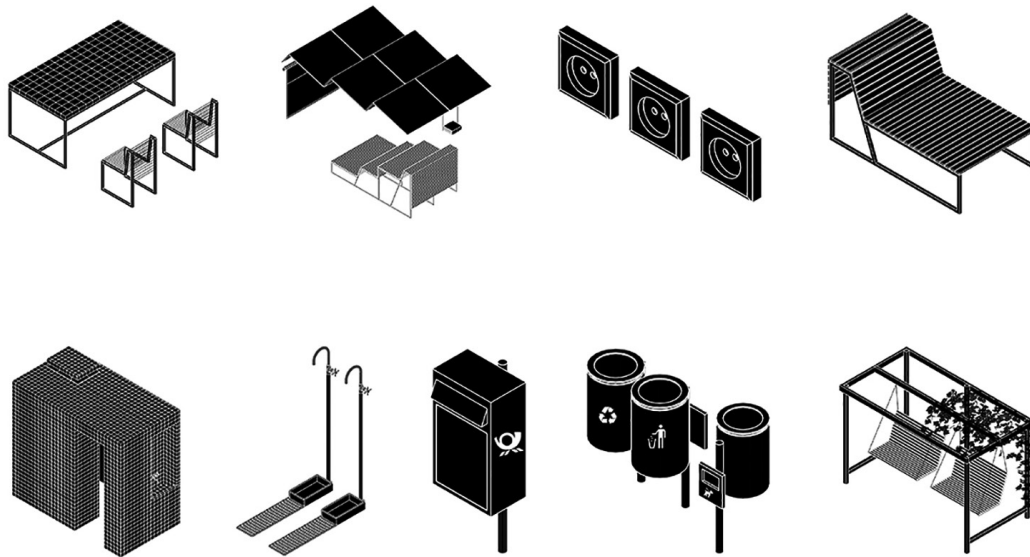
What exactly do you mean by third space? How does such a space look?

The term »third space« is coined by the theorist Homi K. Bhabha.³ He describes the third space as a transitory space, where postcolonial power relations and norms are subverted by political, aesthetic, or everyday practices. A third space is not a physical place; it is much more a space where hybrid identifications are possible and where cultural transformations can happen. Third spaces enable cultural hybridity, that is to say identities and practices, which perform difference without an assumed or imposed hierarchy.

We believe that the increased physical and virtual connectivity of today results in an exciting, constant exchange of ideas that defines viable alternatives to mainstream, capital-driven territorial development. Borrowing from French novelist and filmmaker George Perec, we are interested in infra-ordinary⁴ experiences that are generated within the complexities of a society in transformation. These experiences take the form



Rethink Athens, forty-five degrees and Also Known As Architects. The competition proposal tackles the divide between large scale, top-down planning and the minute actions of everyday people in public space.



Rethink Athens, forty-five degrees and Also Known As Architects. The intention is to transform the street – so far perceived as a representation of power – into an urban living room, open to everyone

of community self-organization, cooperatives, informal gatherings, and spontaneous actions often found at the periphery of cultural production.

So you're examining different »urban rituals« as models for spatial occupation within temporary societies. What do you understand as rituals and why are you interested in them?

Traditionally investigated by anthropology, religious studies and sociology, rituals have always been necessary practices in human and animals' social lives. In the past they were connected to local collective identities, mostly referred to agriculture, religion or myths. In increasingly secular times, contemporary rituals still satisfy a wide spread need for identification. For example, they strengthen the capacity of collective action to reach ambitious goals.

In our work we try to understand the urban realm not only through design but also by borrowing methods from anthropology that look into the user's perspective. We call these examples rituals, because they are inclusive and have the power to create ties of kinship and spatial identity. We call them radical because, in a sense, they are fundamental but at the same time they are innovative, pointing to possible alternative futures.

How these »Third Spaces« and »Radical Rituals« inform your understanding of urban space making and the planning of future cities?

In the same way that centuries of cultural crossing have generated new spatial configurations, we believe that today's cultural crossings offer opportunities for the emergence of a new commonality.

We speculate on a future with a highly hybridized urban society, in which a transnational youth develops skills, resources, and knowledge accumulated through multiple cultural repertoires, digital technologies, and social media. New traditions, heritage,



Rethink Athens, forty-five degrees and Also Known As Architects. Adjacent streets are occupied by temporary installations that nurture existing grassroots initiatives. Here an open-air library becomes a space for socializing and exchanging ideas.

and imaginaries, collective actions, occasions, and conventions are in the making and new memories and technologies can shape radical practices of commoning grounded on spatial justice and environmental awareness. They help to reinvent common space beyond identity and borders, in both digital and social space.

The last decades of urban planning have been characterized by individualization, mobility, privatization, and speculation, and the making of Smart Cities. In your work it has been a primary concern to counteract this course and instead create common territory for diversity, commonality, public, and democratic construction and decision-making. What approaches do you use to do so?

The city is the spatial manifestation of the relationship between people and power and results as the stratification of consecutive political visions. Nowadays, democracy has lost its connection with urban daily life, and it is mostly sustained without the involvement of the people, who find it hard to claim their right to the city. We are interested in initiating processes that offer the opportunity to understand the city and its dynamics. We see our role and the role of architecture as a mediator, as part of a broader shared knowledge and practice.

Traditionally, the architect is thought of as someone sitting in their studio making great plans. But architecture only really begins when it is inhabited: we are interested in the acts of appropriation as a means of co-authorship and agency of the user, especially when it comes to public space. Appropriation is crucial because it creates a discussion, a collaboration beyond the architect's intervention. Ultimately, what we are interested in is proposing a kind of symbolic, primordial order waiting for individuals to negotiate their spatial boundaries through public behaviors.



Rethink Athens, forty-five degrees and Also Known As Architects. Many small squares in central Athens are deserted and abandoned. We proposed to repurpose them into centers for horizontal learning and making. Taking advantage of the amazing climate, local artisans could hold outdoor workshops and events.

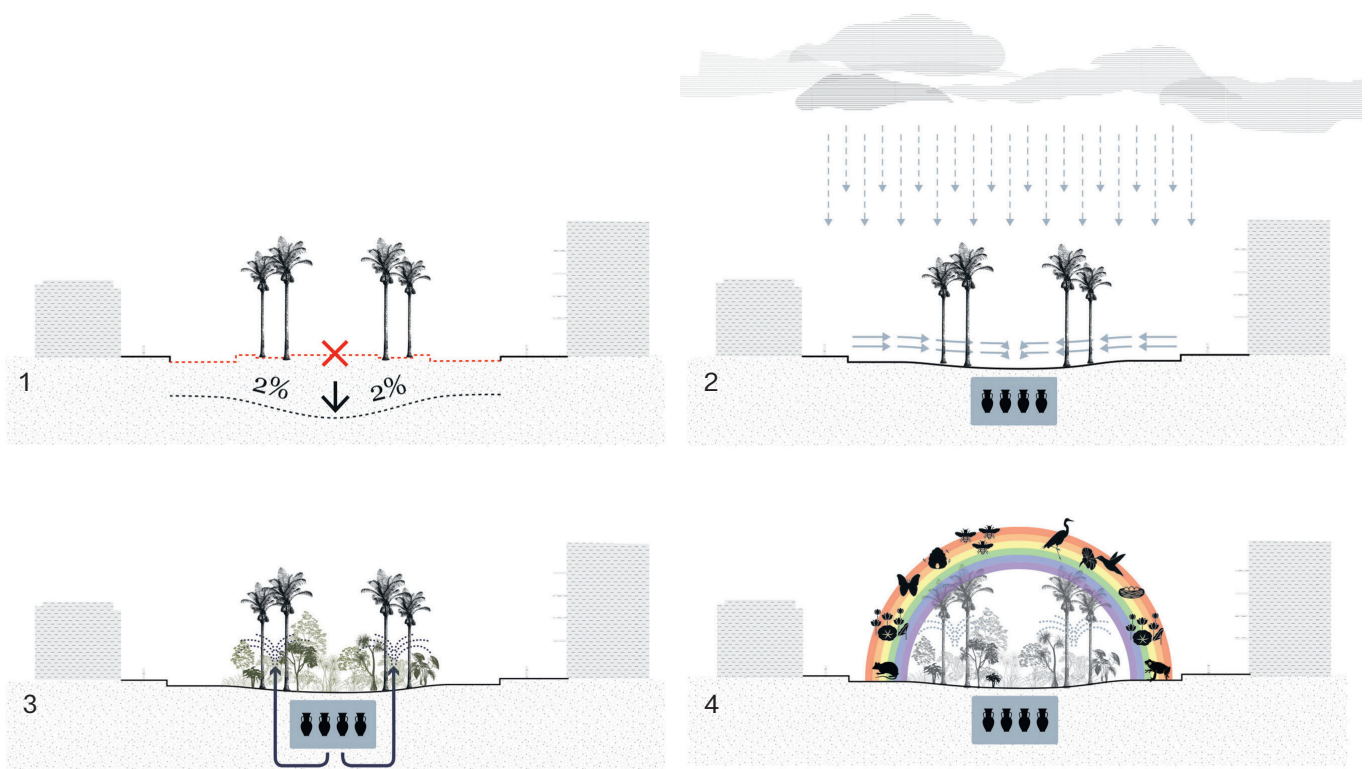
Using the example of your speculative Rethink Athens project, can you explain how you as architects deal with the design of public space where surfaces, materials, things, and people meet; where the emancipatory potential for a democratic approach to architecture and space can be embedded?

The brief foresaw the pedestrianization of a great urban boulevard in the center of Athens and the introduction of a new tram line. The task was to design this new pedestrian axis: three adjacent squares and the adjacent streets. This project happened to coincide with the massive riots in Greece in 2011 against austerity measures. These riots showed how citizenship is expressed through frustration and friction, which are not particularly constructive as a reaction to top-down decisions.

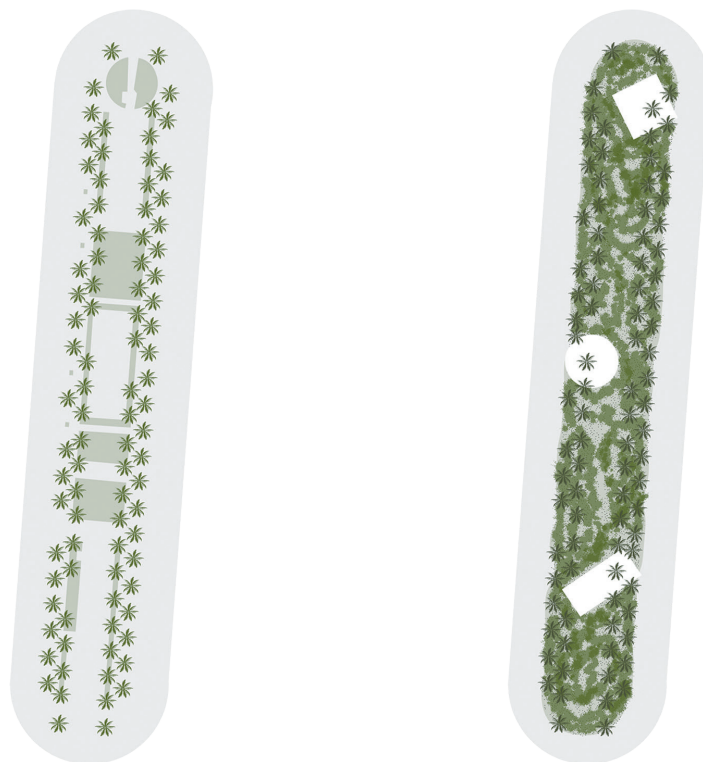
The question we asked ourselves was how can we hijack the planned infrastructure – which is an effective, costly, and permanent intervention – and make it accessible for all? We wanted to gift the city with an open framework for the citizens to reinvent their own urban experience through spontaneous appropriation and emphasize the possibilities offered by technology to reconnect citizens with public space now that »the public« is becoming more and more digital.

We proposed a series of small-scale infrastructures that will inhabit this large-scale intervention in an additive approach, introducing physical elements that carry out the choreographies and set the stage for a multitude of possible uses for a vibrant, contemporary, and adaptive neighborhood.

It's nice to see how you seek a primary moment of entanglement and empowerment for all inhabitants of a territory through architecture and urban planning of public and collective space and that you strengthen a collective instead of a divided space. I imagine it to be difficult to respond to all needs and to integrate the citizens into decisions.



Oasis, forty-five degrees and Giulia Domeniconi. Rainwater is collected throughout the winter on-site, due to the tilted permeable surface and is store for the summer, allowing for a new ecosystem to grow and flourish.



Oasis, forty-five degrees and Giulia Domeniconi. The proposal seeks to create a new spatial hierarchy, to reverse the relationship between hard and soft materials. We envisioned a dense green volume, interrupted by 3 squares, clearings in the »woods.«



Oasis, forty-five degrees and Giulia Domeniconi. The three squares are designed for different purposes and in relation to the areas around them.

Today, people have lost agency over making their own cities. The scale and complexity of the phenomena at hand often preclude direct participation. However, when citizens see the potential of direct actions, which are somehow related to their daily life, they are eager to participate. When the design's scale and sensitivity peaks to people's everyday lives and needs, they can relate to it and therefore participate with valuable contributions.

Most of our work is aimed exactly at downscaling large design tasks to smaller gestures that are more familiar and relate to »non-professionals.« In our designs we often propose open frameworks as a morphological base that is not fixed, but can rather be influenced and reconfigured by the final users.

This attitude helps us avoid simplified dichotomies that define the built environment in the traditional narrative: local/global; Culture/Nature; Urban/Landscape; top-down/bottom-up; human/non-human. On the contrary, we embrace reality and its complexities. We always try to understand the locality of each project in all its multilayered realities, in which we make use of the potential of the existing environment and seek for the minimum intervention that leads to a greater benefit.

Can you provide an example of how you achieve this?

In our proposed project *URBAN OASIS* – for a competition for the transformation of a public space into a »cultural« square, we were inspired by the Epicurean philosophy of the garden.

The rapid urbanization and the economic crisis of recent years in Greece downplayed the role of public spaces, cutting off the city life from the natural environment almost entirely.



By employing traditional techniques and material inspired by beehives found in the Mediterranean region, we want to revive local crafts and highlight a heritage of manual skills. Woven straw and clay are easily available and resistant to maintenance.

We wanted to explore the potential of natural environments in urban spaces, functioning as places of cultural production and cultivation of oneself. After all, we do not understand culture just as art-objects within museum spaces, or other cultural institutions that are often not accessible to everyone. We asked ourselves what kind of a new »cultural« space in the city could be open to everyone, regardless of economic and social situation, that would encourage the redefinition of our relationship with the natural environment and our society.

We proposed to transform a concrete square into a community garden with local plants and flowers, water and clearings, organized according to the natural ecology of an oasis where winter rainwater is recuperated for summer refreshment. The aim of this gesture was to offer a place for rejuvenation, meditation, and exchange, while promoting individual and collective responsibility and cultivation of oneself and their community. With its simple geometries and careful choice of materials, the project had the ambition to become the center of the neighborhood, accessible to everyone, and to encourage appropriation, connect built and unbuilt, old and new – and allow for a new ecosystem to grow and flourish.

This example shows that with your projects you not only aim to create hybrid, trans-cultural spaces for humans but also create common habitats for humans and other species.

For example, with our proposal for the Greek national pavilion for the Venice Architecture Biennial 2020 entitled *How Will We Live Together?*, we used the opportunity to question the role of architecture in caring for the habitat by asking ourselves what does that »we« include? Anthropocentrism and exploitation of resources has put all forms of life on earth in danger, including human life.

We believe that architecture is about resources – not only material or financial resources but also about the intangible resources of human and nonhuman knowledge. In our practice we are interested in collecting protocols and collective approaches.

»If bees disappeared from the face of the Earth, man would only have four years left to live« is a famous quote that Albert Einstein is often credited with, points to the crucial importance of multispecies interdependencies.

So, you proposed a project in which bees, coexistence, and collaboration play a crucial role ...

Yes, for the duration of the Biennale we proposed to occupy the Greek pavilion with beehives and run a honey production station, workshops, and events, to promote beekeeping and provide information on its environmental benefits. We wanted to underline the importance of preservation and creation of habitats for bees since our survival depends on them. Eighty percent of all domestic crops and wild plants depend on pollination by bees. Although the beehives would be stored in the Greek pavilion, the bees would obviously be free to roam and collect pollen all around the Giardini, creating a honey mix which is very specific to the botanical environment of Venice but at the same time also represents a scaled-down version of the globe.

Issues such as climate change, migration, and the exploitation of our planet's resources are central to this work. The protection of biodiversity and improvement of the habitats of all species is the most crucial precondition to understand »how we will live together.«

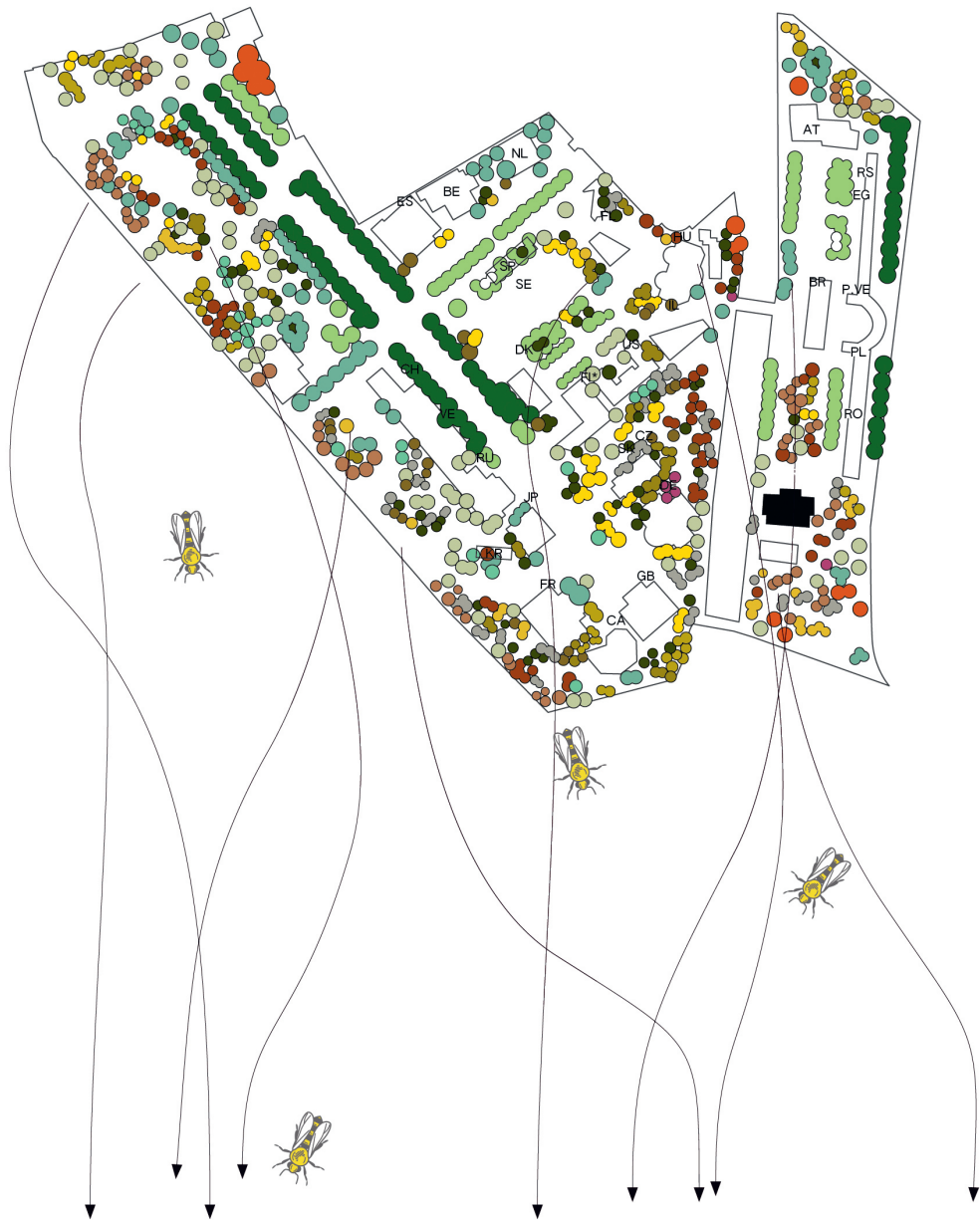
In her text Care, Elke Krasny points out that »a caring architecture is both locally specific and globally conscious.«⁵ According to that, you could say that the bee project is a particularly good example of »caring architecture.«

Beekeeping in Greece is very much part of the country's history. Bees and honey play a leading role in Greek mythology, customs, and traditions, but the point here is that the honey-making process shines some interesting questions about agency and interdependencies. This stunning contrast between the bells and whistles of nationalist pride and the reality of an interconnected, a-hierarchical natural world, was the entry point for a proposal that challenges the very premise of biennales and expos as a celebration of national identities.

We asked ourselves this: If we were producing honey at the Giardini of the Venice Biennale with Greek bees and Greek methods, would this be a Greek honey, an Italian one, or something else altogether? Most of the trees in the Giardini are originally Mediterranean, but others come from exotic lands as a show of past colonialism and imperialism. In this sense, the garden is kind of denying the logic that, during Italian fascism, arranged the national pavilions according to geographical proximity and hierarchies of power.

We proposed a literal and metaphorical cross-border pollination of the Biennale's Giardini in which bees will be the ambassadors of a non-hierarchical management of natural resources by pollinating trees all around the area, an example of a possible future of coexistence of human and nonhuman species beyond borders and conflicts.

Ej	Euonimus Japonicus	175
	Pittosporum Tobira	93
Ti	Tilia	84
Ln	Laurus Nobilis	78
Ce	Celtis Australis	76
Bq	Buxus Sempervirens	72
	Buxus Balearica	2
	Broussonetia Papyrifera	1
Cu	Cupressus Arizonica	52
	Cupressus Macrocarpa	2
	Cupressus Sempervirens	23
LI	Ligustrum Lucidum	67
Ac	Acer Campestre	53
Ap	Acer Palmatum	4
Ai	Acer Palmatum Japonicum	1
	Prunus Laurocerasus	40
Pl	Planatus Hybrida	39
Rp	Robinia Pseudoacacia	6
Rb	var. Bessoniana	32
Tb	Taxus Baccata	34
Ph	Pinus Halepensis	4
Pn	Pinus Nigra	6
Pp	Pinus Pinea	21
Qi	Quesrcus Ilex	26
	Aucuba Japonica	26
Aj	Albizia Julibrisin	21
Gt	Gleditsia Triacanthos	18
Um	Ulmus Montana	16
	Ulmus Laevis	1
	Viburnum Tinus	13
Oe	Olea Europea	10
	Phyllostachys mitis	9
	Ruscus Aculeatus	8
Ah	Aesculus Hippocastanum	7
Pg	Populus Nigra	7
Aa	Ailanthus Altissima	6
Js	Jubea Spectabilis	6
Cx	Chamaerops excelsa	1
	Chamaerops humilis	5
Cb	Carpinus Betulus	5
Fp	Fatsia Japonica	5
Sj	Sophora Japonica	4
	Jasminum	4
Cs	Cercis Siliquastrum	4
Mg	Magnolia Grandiflora	4
	Philadelphius Coronarius	4
Fs	Facus Sylvatica	4
	Sambucus Nigra	3
Fe	Fraxinus Excelsior	2
	Fraxinus Ornior	1
	Hydrangea Ortensia	2
Ca	Cedrus Atlantica	1
	Dedrus Diodara	1
	Hydrangea Ortensia	2
Pm	Punica Granatum	2
Hs	Hibiscus Syriacus	1



»If we were producing honey at the Giardini of Venice Biennale with Greek bees and Greek methods, would this be a Greek honey, an Italian one, or something else altogether?«

Closing, can you tell us in summary again what forty-five degrees stands for and how you imagine an architectural practice that addresses contemporary challenges and creates future possibilities for change?

We believe that architecture is about resources – not only material or financial resources but also about the intangible resources of human and nonhuman knowledge. In our practice we are interested in collecting protocols and collective approaches. There is not only one way to make space. We are interested in reality as much as in fiction and speculation: although we want to visualize alternative futures, we believe that the inspiration for this usually comes from the minute, the trivial, the infra-ordinary. Hence our interest in informal practices. We are not longing for a return to the vernacular – we seek to learn from it to invent novel ways of conceiving, managing, and occupying space that could undo centuries of spatial exploitation.

This interview was conducted by Denise Helene Sumi.

forty-five degrees is an architecture and urban design practice dedicated to the critical making of collective space and thinking of possible alternative futures. It was founded by Alkistis Thomidou and Gianmaria Socci, in October 2019.

Alkistis Thomidou is a Berlin-based architect. She holds a diploma in architecture and a master's degree in urban design from the ETH Zurich. She has practiced in Germany and abroad and was teaching assistant at TU Braunschweig. She is currently a fellow at Akademie Schloss Solitude. Her interests lie at the intersection of interdisciplinary research, design, and artistic experimentation.

Gianmaria Socci is an architect and educator based in Berlin. He holds a master's degree in architecture and a MAS in urban design. He has practiced and taught in Switzerland, Thailand and the United States. Additionally to his work as forty-five degrees, he is a mentor for CanActions School on housing, and the director of the nonprofit organization Space Saloon.

1 Gilles Clément, *Le jardin planétaire. Réconcilier l'homme et la nature*, Paris 1999.

2 Gilles Deleuze, Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, London 1988.

3 Homi K. Bhabha, *The Location of Culture*. London/New York 1994: p.37.

4 Perec uses the neologism »infra-ordinary« to describe the ordinary and the everyday details, movements, and

rhythms around us. Georges Perec, *The Infra-Ordinary*. Paris 1973.

5 Elke Krasky, »Care,« in: *AA Files 76*, edited by Maria Shéhérazade Giudici, London 2019.